APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/586,230	07/18/2006	Ronggao Li	38701-005US1	2958

69713   7590   06/01/2009
OCCHIUTI ROHLICEK & TSAO, LLP
10 FAWCETT STREET
CAMBRIDGE, MA 02138

EXAMINER
ADDY, ANTHONY S

ART UNIT	PAPER NUMBER
2617	

NOTIFICATION DATE	DELIVERY MODE
06/01/2009	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

INFO@ORTPATENT.COM

	Application No.	Applicant(s)
Office Action Summary	10/586,230	LI, RONGGAO
	Examiner	Art Unit	
	ANTHONY S. ADDY	2617	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS,
WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed
  after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any
  earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) ☒ Responsive to communication(s) filed on <u>12 March 2009</u>.

2a) ☐ This action is **FINAL.**   2b) ☒ This action is non-final.

3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is
   closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) ☒ Claim(s) <u>1-8</u> is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5) ☐ Claim(s) _____ is/are allowed.

6) ☒ Claim(s) <u>1-8</u> is/are rejected.

7) ☐ Claim(s) _____ is/are objected to.

8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) ☐ The specification is objected to by the Examiner.

10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a) ☐ All b) ☐ Some * c) ☐ None of:

      1. ☐ Certified copies of the priority documents have been received.

      2. ☐ Certified copies of the priority documents have been received in Application No. _____.

      3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage
        application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
    Paper No(s)/Mail Date _____.

4) ☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____

5) ☐ Notice of Informal Patent Application

6) ☐ Other: _____.

DETAILED ACTION

1.   This action is in response to applicant's amendment filed on March 12, 2009.

Claims 1-8 are now pending in the present application.

Response to Arguments

2.   Applicant's arguments with respect to **claims 1-8** have been considered but are

moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 103

3.   The text of those sections of Title 35, U.S. Code not included in this action can

be found in a prior Office action.

4.   Claims 1, 6 and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable

over **Cohen et al., U.S. Patent Number 7,299,349 (hereinafter Cohen)** and **Aitken et**

al., U.S. Patent Number 6,947,743 (hereinafter Aitken).

Regarding claim 1, Cohen teaches a method for implementing a Push service,

comprising the following steps: a Push Initiator (*601*) sending a Push message to a

Short Message Service Center (*609*) through a Push Proxy Gateway (PPG) (*604*) (see

col. 8, lines 47-52, col. 10, lines 24-29 and Fig. 6); and delivering the push message to

a mobile station (*e.g., wireless device 603*) (see col. 10, lines 16-21 and Fig. 6).

Cohen fails to explicitly teach the Short Message Service Center segmenting the

Push message to obtain a group of short messages, and scheduling the group of short

messages in a transaction mode and delivering them to a mobile station; after receiving

the group of short messages, the mobile station recombining them into an integral

message.

In an analogous field of endeavor, Aitken teaches a method of transferring short

messages between non-compatible networks, wherein a short message gateway

comprises a gateway function (SMGF) for segmentation of messages if a network has a

shorter maximum message length than another network (*i.e., reads on the claimed

limitations of the Short Message Service Center segmenting the Push message*) (see

col. 2, lines 5-9 & 52-54). For example, Aitken teaches in order to facilitate the delivery

of short messages of length greater than 128 octets from an IMT-2000 SMSC to a

subscriber in a PDC network, the short message is segmented into lengths of 128

octets or shorter and delivered as ***two separate short messages*** (*i.e., reads on the

claimed* limitations *of segmenting the Push message to* ***obtain a group of short

messages***), and these ***two short messages will then be re-assembled on the PDC

handset*** (*i.e., reads on the claimed limitations of scheduling the group of short

messages in a transaction mode and delivering them to a mobile station; after receiving

the group of short messages, the* ***mobile station recombining them into an integral

message***) (see col. 5, lines 13-30).

It would therefore have been obvious to one of ordinary skill in the art at the time

of the invention to modify Cohen with the teachings of Aitken to include a method of the

Short Message Service Center segmenting the Push message to obtain a group of

short messages, and scheduling the group of short messages in a transaction mode

and delivering them to a mobile station; after receiving the group of short messages, the

mobile station recombining them into an integral message, in order to convert short messages to an appropriate message length format before transmission to ensure message delivery to subscriber handsets with short message length limitations as taught by Aitken (see col. 2, lines 5-9 & 52-54 and col. 5, lines 13-21).

Regarding claim 6, Cohen in view of Aitken teaches all the limitations of claim 1. Cohen in view of Aitken further teaches a method, wherein said Short Message Service Center (*609*) is specially used to bear a Push service (see *Cohen*, col. 10, lines 24-29 and Fig. 6).

Regarding claim 7, Cohen in view of Aitken teaches all the limitations of claim 6. Cohen in view of Aitken further teaches a method, wherein said SMSC (*609*) is arranged separately or integrated in a WAP Gateway (see *Cohen*, col. 10, lines 24-29 and Fig. 6).

5.   Claims 2, 3 and 4 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Cohen et al., U.S. Patent Number 7,299,349 (hereinafter Cohen)** and **Aitken et al., U.S. Patent Number 6,947,743 (hereinafter Aitken)** as applied to claim 1 above, and further in view of **Boyle et al., U.S. Patent Number 6,138,158 (hereinafter Boyle)**.

Regarding claim 2, Cohen in view of Aitken teaches all the limitations of claim 1. Cohen in view of Aitken fails to explicitly teach a method, wherein said transaction mode refers to continuously sending in a predetermined time a group of short messages obtained by segmenting, and resending one or more one of the messages when they are sent unsuccessfully.

In an analogous field of endeavor, Boyle teaches a method for implementing a push service, wherein an encoded PUSH PDU is segmented into pieces of message fragments, and the message fragments are ***successively*** and individually sent to a client device (*i.e., reads on the claimed limitations of "wherein said transaction mode refers to continuously sending in a predetermined time a group of short messages obtained by segmenting"*) (see col. 16, lines 3-8 and Fig. 8C; steps 743 & 751). According to Boyle, if no acknowledgment for any of the message fragments is received, then the message system ***resends*** the message fragment until an acknowledgement is received (see col. 16, lines 8-11 and Fig. 8C; step 767) (*i.e., reads on the claimed limitations of "resending one or more one of the messages when they are sent unsuccessfully"*).

It would therefore have been obvious to one of ordinary skill in the art at the time of the invention to modify Cohen and Aitken with the teachings of Boyle to include a method, wherein said transaction mode refers to continuously sending in a predetermined time a group of short messages obtained by segmenting, and resending one or more one of the messages when they are sent unsuccessfully, in order to ensure that messages with length limitations are delivered to a client device successfully as taught by Boyle (see col. 15, line 64 through col. 16, line 21).

Regarding claim 3, the combination of Cohen, Aitken and Boyle teaches all the limitations of claim 2. The combination of Cohen, Aitken and Boyle further teaches a method, wherein if all the short messages of the group obtained by segmenting are sent successfully in a predetermined time, the Short Message Service Center returns an

Acknowledgement Message to the PPG, and the PPG sends a Result Notify Message

to the Push Initiator according to the Acknowledgement Message (*i.e., reads on the*

teachings of Boyle that the messenger in the link server receives a confirmation

message from the message system, such as an SMSC, and the confirmation message

is kept in the messenger for future reference) (see *Boyle*, col. 15, line 39, col. 16, lines

14-21 and Fig. 4).

Regarding claim 4, the combination of Cohen, Aitken and Boyle teaches all the

limitations of claim 2. The combination of Cohen, Aitken and Boyle further teaches a

method, wherein if any one of the short messages of the group obtained by segmenting

is sent unsuccessfully in a predetermined time, the Short Message Service Center

returns a Submission Failure Message to the PPG, and the PPG sends a Result Notify

Message to the Push Initiator according to the Submission Failure Message (*i.e., reads*

on the teachings of Boyle that the messenger in the link server receives a confirmation

message from the message system, such as an SMSC, and if the confirmation indicates

that the encoded PUSH PDU is not successfully delivered to the client device, the

corresponding notification is queued into the queue list for another) (see *Boyle*, col. 15,

line 39, col. 16, lines 14-21 and Fig. 4).

6.   Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over **Cohen et**

al., U.S. Patent Number 7,299,349 (hereinafter Cohen) and Aitken et al., U.S. Patent

Number 6,947,743 (hereinafter Aitken) as applied to claim 1 above, and further in

view of **Vance, Jr. et al., U.S. Patent Number 7,043,264 (hereinafter Vance)**.

Regarding claim 5, Cohen in view of Aitken teaches all the limitations of claim 1.
Cohen in view of Aitken fails to explicitly teach a method, wherein after sending the
Push message to the Short Message Service Center, the PPG suspends the present
transaction to wait for the processing result thereof from the Short Message Service
Center and continues to process the next transaction.

In an analogous field of endeavor, Vance teaches a messaging server sends an
SMS message through a Short Message Service Center (SMSC) to a client device, and
if a response is not received, the messaging server lets the SMSC handle sending the
message to the client and passively wait for a response (see col. 5, line 67 through col.
6, line 5). According to Vance, since SMS is a store and forward system the SMSC
ensures the timely delivery of messages to the client, and the SMSC has the ability to
detect that the client is not available and will deliver any waiting messages when the
client becomes available (see col. 6, lines 6-13), thus one of ordinary skill in the art
recognizes it would have been obvious for the PPG to suspend a current transaction
and continue to process the next transaction till an acknowledgement is received from
an SMSC to efficiently utilize network bandwidth resources.

It would therefore have been obvious to one of ordinary skill in the art at the time
of the invention to modify Cohen and Aitken with the teachings of Vance to include a
method, wherein after sending the Push message to the Short Message Service Center,
the PPG suspends the present transaction to wait for the processing result thereof from
the Short Message Service Center and continues to process the next transaction, in

order to efficiently utilize network bandwidth resources and to reliably deliver messages

to a client in as close to real time as taught by Vance (see col. 6, lines 3-13 & 43-48).

7.   Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over **Cohen et**

al., U.S. Patent Number 7,299,349 (hereinafter Cohen) and **Aitken et al., U.S. Patent**

Number 6,947,743 (hereinafter Aitken) and **Boyle et al., U.S. Patent Number**

6,138,158 (hereinafter Boyle) as applied to claim 2 above, and further in view of

Vance, Jr. et al., U.S. Patent Number 7,043,264 (hereinafter Vance).

Regarding claim 8, the combination of Cohen, Aitken and Boyle teaches all the

limitations of claim 2. The combination of Cohen, Aitken and Boyle fails to explicitly

teach a method, wherein after sending the Push message to the Short Message Service

Center, the PPG suspends the present transaction to wait for the processing result

thereof from the Short Message Service Center and continues to process the next

transaction.

In an analogous field of endeavor, Vance teaches a messaging server sends an

SMS message through a Short Message Service Center (SMSC) to a client device, and

if a response is not received, the messaging server lets the SMSC handle sending the

message to the client and passively wait for a response (see col. 5, line 67 through col.

6, line 5). According to Vance, since SMS is a store and forward system the SMSC

ensures the timely delivery of messages to the client, and the SMSC has the ability to

detect that the client is not available and will deliver any waiting messages when the

client becomes available (see col. 6, lines 6-13), thus one of ordinary skill in the art

recognizes it would have been obvious for the PPG to suspend a current transaction and continue to process the next transaction till an acknowledgement is received from an SMSC to efficiently utilize network bandwidth resources.

It would therefore have been obvious to one of ordinary skill in the art at the time of the invention to modify Cohen, Aitken and Boyle with the teachings of Vance to include a method, wherein after sending the Push message to the Short Message Service Center, the PPG suspends the present transaction to wait for the processing result thereof from the Short Message Service Center and continues to process the next transaction, in order to efficiently utilize network bandwidth resources and to reliably deliver messages to a client in as close to real time as taught by Vance (see col. 6, lines 3-13 & 43-48).

Conclusion

8.   Any inquiry concerning this communication or earlier communications from the examiner should be directed to ANTHONY S. ADDY whose telephone number is (571)272-7795. The examiner can normally be reached on Mon-Thur 8:00am-6:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Patrick Edouard can be reached on 571-272-7603. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR.

Status information for unpublished applications is available through Private PAIR only.

For more information about the PAIR system, see http://pair-direct.uspto.gov. Should

you have questions on access to the Private PAIR system, contact the Electronic

Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a

USPTO Customer Service Representative or access to the automated information

system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Anthony S Addy/
Examiner, Art Unit 2617